

Who is affected by GREEN CHEMISTRY?

PROBLEM

Workers are directly exposed to high-volume chemicals with potential immediate and long-term health effects.

WORKPLACE

SOLUTION

Expand & improve chemical hazard data disclosure. Incorporate green chemistry lifecycle principles to prevent exposure to harmful chemicals.

PROBLEM

TSCA holds the US EPA, rather than the manufacturer, responsible for determining the human health and environmental impacts of new chemicals.

GOVERNMENT

SOLUTION

TSCA should be reformed to require manufacturers to conduct improved screening and disclosure of new chemicals. Chemical databases need to be developed and populated with hazard information in conjunction with clear producer standards for green chemistry.

The Industrial Laboratory: WHERE CHEMICALS ARE MADE

GOALS

PRESENT

FUTURE

IMPROVED PROCESS

Greener chemical production methods have not been fully utilized.

Integrate green chemistry principles into the research, design, manufacturing, use and disposal of new products to prevent hazardous substances from reaching humans and the environment.

IMPROVED PRODUCT

The backlog: 75% of 83,000 chemicals in the TSCA inventory were not subjected to health hazards review.

While chemical production doubles every 25 years, 85% of new EPA chemicals submissions lack health effects data.

Chemical producers should be required to test for and disclose human health and environmental impacts before releasing new chemicals into the market.

Lifecycle analyses should be used to decrease impacts of chemical production, use and disposal.

IMPROVED PROTECTION

95% of new chemicals reported to the EPA request product secrecy allowing chemical ingredient concealment.

Require disclosure of the chemical composition of consumer products.

Prioritize high-risk chemicals.

PROBLEM

Pollution of air, water and soil from chemical manufacturing negatively affects ecosystems and human health. Every year more than a billion dollars is spent to clean up hazardous waste Superfund sites in California.

ENVIRONMENT

SOLUTION

Require and reward chemical producers to adopt and incorporate Green Chemistry processes.

PROBLEM

Hundreds of chemicals in our daily products could be toxic to us, but are not regulated sufficiently because of incomplete information. In 2004, there were 240,000 cases of preventable childhood disease in California attributable to chemical substances.

HOME

SOLUTION

Increase chemical and safety information available to consumers. Expand biomonitoring studies to understand the health impacts of new and existing chemicals.